

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Amendment of Part 80 of the)
Commission's Rules Concerning Automated)
Maritime Telecommunications System Stations)
)
)

RM No. 9664

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

COMMENTS OF THE
NATIONAL ASSOCIATION OF BROADCASTERS

I. INTRODUCTION

The National Association of Broadcasters ("NAB")¹ submits the following Comments in response to the petition for rulemaking filed by RegioNet Wireless License, LLC ("RegioNet") to amend the Commission's rules concerning Automated Maritime Telecommunications System ("AMTS") stations. This petition requests the Commission to commence a proceeding for the purpose of eliminating existing rules requiring the submission of engineering studies with applications for AMTS stations. Given the important role these rules play in protecting television broadcasters from harmful interference by AMTS stations, the Commission should not issue a *Notice of Proposed Rulemaking* proposing to eliminate existing requirements to submit engineering studies with AMTS applications. Particularly in light of the current transition to digital television, any proposal to eliminate significant technical requirements concerning television interference is clearly premature.

¹ NAB is a non-profit, incorporated association of radio and television stations and broadcast networks which serves and represents the American broadcasting industry.

II. BACKGROUND

AMTS stations provide automated, integrated, interconnected ship-to-shore communications similar to a cellular phone system for tugs, barges, and other maritime vessels. In formulating the rules for AMTS stations, the Commission considered the potential for interference to television reception, particularly television Channels 10 and 13, because of the proximity of AMTS frequencies to those channels, and conditioned the operation of AMTS coast stations on the requirement that no harmful interference be caused to television reception.² Under the Commission's rules, an applicant proposing to locate an AMTS station within 169 kilometers (105 miles) of a Channel 13 television station, or within 129 kilometers (80 miles) of a Channel 10 station, must submit an engineering study demonstrating the means of avoiding interference within the television station's Grade B contour.³ In addition, any AMTS licensee that despite these precautions causes interference to television reception within the station's Grade B contour must eliminate the problem within ninety days or cease operations, and must help resolve complaints of interference outside the television station's Grade B contour.⁴

III. THE COMMISSION SHOULD NOT COMMENCE A PROCEEDING FOR THE PURPOSE OF ELIMINATING EXISTING ENGINEERING STUDY REQUIREMENTS FOR AMTS APPLICANTS.

A. To Ensure Interference-Free Television Service, AMTS Applicants Must Continue To File Engineering Studies Regarding Interference To Television Reception With Their Applications.

In its Petition, RegioNet argues that "the requirement of the Commission's Rules for the filing of an engineering study in support of an AMTS application has lost its

² 47 C.F.R. § 80.215(h).

³ 47 C.F.R. § 80.475(a)(1).

⁴ 47 C.F.R. § 80.215(h)(4).

utility and should be eliminated.”⁵ Incredibly, RegioNet attempts to support this argument by alleging that there has been “no documented report of harmful interference directly to a TV receiver” since 1982.⁶ RegioNet seems to suggest that the Commission’s rules are deficient *because* there allegedly have been no reported cases of interference to television reception caused by AMTS operations. RegioNet implies that, in order for the Commission’s rules to be effective, there should at least be *some* interference to television reception. NAB disagrees.

The Commission’s rules are intended to protect television receivers from AMTS interference. If RegioNet’s claim that there have been no reported cases of interference to television reception for the past seventeen years is accurate, then this is evidence that the Commission’s rules are working satisfactorily. The minimal requirement that AMTS applicants file engineering studies and address concerns raised by broadcasters whose viewers would be impacted by the proposed operations is a small price to pay to ensure the technical integrity of the television broadcasting bands.

As NAB has documented in a related proceeding,⁷ consumers generally change the channel or simply turn off their receivers when they experience objectionable interference to broadcast services. They rarely file formal complaints with the Commission. Thus, the lack of formal interference complaints to the Commission does not necessarily establish RegioNet’s claim that AMTS stations do not cause destructive interference to the reception of television Channels 10 and 13.

⁵ RegioNet Petition at 10.

⁶ *Id.*

⁷ See Joint Comments of the National Association of Broadcasters and the Association for Maximum Service Television on the Second Further Notice of Proposed Rule Making, PR Docket 92-257, filed September 15, 1997, at 4.

To ensure that television viewers continue to receive interference-free service, the Commission should retain its requirement that AMTS applicants perform and submit detailed engineering studies showing how proposed AMTS stations comply with the current interference criteria set forth in the Commission's rules.

B. Regionet's Technical Studies Raise A Number Of Unanswered Questions.

NAB appreciates the effort that Regionet has put forth to study the impact of simulated AMTS interference to various television receivers. When the Commission makes decisions that relate to interference, it must base them on sound technical data, rather than unsubstantiated claims by parties wanting interference protection criteria relaxed. Regionet's technical studies attempt to provide the sound technical basis upon which the Commission can make an informed decision.

In our brief review of the technical exhibits provided by Regionet, NAB has, however, identified several issues that we believe the Commission must resolve before making any proposals to alter existing AMTS technical requirements. These issues include:

The definition of "just perceptible" interference. Regionet's technical study defines "just perceptible" interference as interference that causes "the visual signal of channel 13 [to be] minimally degraded from a normal viewing distance of 10-12 feet."⁸ However, the accepted standard for subjectively assessing the quality of television

⁸ Regionet Petition at Exhibit 1, page 4.

pictures specifies that the viewing distance should be four to six times the picture height.⁹ Thus, for a 13-inch picture screen (with a height of 7.8 inches) the appropriate maximum viewing distance for subjective assessment is about four feet. For a 25-inch screen the appropriate maximum viewing distance is about seven feet, and for the small 9-inch screen the appropriate maximum viewing distance is about three feet. The 10-12 foot viewing distance used in the RegioNet study would have decreased the viewers' ability to perceive interference, and thus caused an underestimation of the impact that AMTS interference has on television reception.

The impact of multiple AMTS transmissions. RegioNet's receiver study only used one carrier as opposed to the "real world" case where there would actually be multiple carriers. An analysis of intermodulation products from AMTS frequencies shows that there are a large number of products that fall within the spectrum used by television Channel 13. Two of these are:

$$1 \times 217.5625 + 2 \times 217.0375 - 2 \times 217.9375 = 215.7625 \text{ MHz}$$

$$1 \times 217.5625 + 2 \times 217.0125 - 2 \times 217.9125 = 215.7625 \text{ MHz}$$

The above intermodulation products are not meant to illustrate "worst case" interference situations. These two products happen to be close to the aural carrier frequency for Channel 13, although others may be closer. A thorough analysis of intermodulation products should be conducted to accurately model the worst case interference that might be caused to Channel 13 reception by AMTS operations.

⁹ *Method for the Subjective Assessment of the Quality of Television Pictures*, CCIR Recommendation at 500-3 (1986).

C. The Commission's Resources Would Be More Efficiently Utilized If Consideration Of Any Technical Changes To The AMTS Rules Were Delayed Until After Mass-Produced Digital Television Receivers Are Widely Available To The General Public.

As the Commission is well aware, digital television service is currently being introduced in the United States. Before any conclusions can be drawn about the susceptibility of digital television receivers to AMTS interference, high-volume mass-produced digital television receivers must be widely available in the marketplace. Only by testing digital television receivers whose production costs have been minimized to the point that they are affordable to the vast majority of Americans can the degree to which AMTS operations will interfere with digital television reception be accurately determined. Thus, the Commission should not make any changes to the interference protection criteria that apply to AMTS stations until high-volume, mass-produced digital television receivers have been thoroughly tested. In light of the fact that a new proceeding would be required to address the issue of AMTS interference to digital television reception, we believe the Commission's limited resources would be more efficiently utilized if any review of AMTS interference standards were conducted after gaining more information about the effect of such interference on high-volume, mass-produced digital television receivers.

Given the on-going transition to digital television, any proposal to alter significantly the technical requirements of AMTS is clearly premature. Moreover, RegioNet states in its petition that "at some point, the Commission is likely to propose

geographic licensing of the AMTS spectrum.”¹⁰ If that statement is indeed correct, then any proposals to alter the technical and other requirements for AMTS stations should be considered in that future proceeding commenced by the Commission to amend the entire licensing approach applicable to AMTS.¹¹ Thus, even RegioNet’s own contentions support NAB’s position that any proposal to alter the existing AMTS engineering requirements is premature.

¹⁰ RegioNet Petition at 10.

¹¹ See, e.g., *Report and Order* in MM Docket No. 94-131 and PP Docket No. 93-253, 10 FCC Rcd 9589 (1995) (when changing the Multipoint Distribution Service licensing system from a site-by-site to a geographic system, Commission overhauled the engineering and technical rules for the service to take account of the altered licensing approach and to define interference protection standards between and among existing MDS licensees, future MDS licensees with geographic licenses, and licensees in other services).

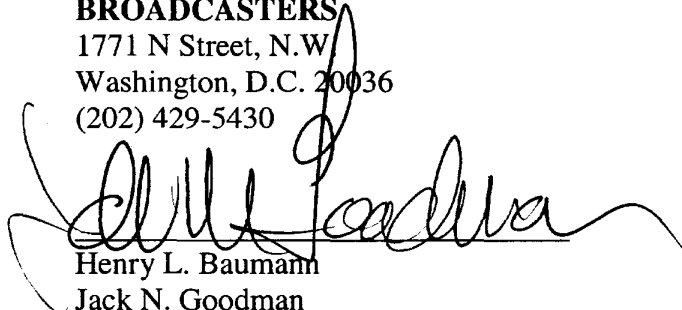
IV. CONCLUSION

The Commission should proceed cautiously when considering requests to eliminate technical requirements that serve to protect the public's free over-the-air television service from interfering signals. The current AMTS regulatory procedures, including the requirement to submit engineering studies with station applications, are designed to serve important informational functions and to forestall potential television interference problems. Significantly altering this regulatory scheme during a period of transition in the broadcast television industry would be ill advised and would not advance the public interest. Thus, the petition should be denied.

Respectfully submitted,

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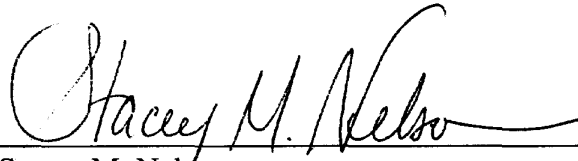
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July 16, 1999

CERTIFICATE OF SERVICE

I, Stacey M. Nelson, Legal Secretary for the National Association of Broadcasters, hereby certifies that a true and correct copy of the foregoing Comments of the National Association of Broadcasters was sent this 16th day of July, 1999, by first-class mail, postage prepaid, to the following:

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A handwritten signature in cursive script, reading "Stacey M. Nelson", written over a horizontal line.

Stacey M. Nelson